

AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) An optical characteristic measuring instrument that measures an optical characteristic of a device under test, comprising:

a polarization separator that receives light emitted from the device under test, separates the received light into p-polarized light and s-polarized light, and outputs the p-polarized light and s-polarized light;

a light generator that generates incident light;

an optical modulator that applies intensity modulation to the incident light, and emits modulated light;

a light inputter that makes the incident light which has undergone the intensity modulation incident on the device under test, wherein the incident light is coincident with a p-polarization axis and an s-polarization axis of said polarization separator;

a first measurer that measures a phase shift equivalent value and an amplitude equivalent value of the incident light based upon the output from said polarization separator;

a second measurer that measures a phase shift equivalent value of the incident light based upon the light emitted from the device under test; and

an optical characteristic measurer that measures the optical characteristic of the device under test based upon the measured results by said first measurer and said second measurer,

wherein the optical characteristic measurer measures the optical characteristic of the device under test based upon the measured result by said second measurer, if there is a deviation between a p-polarization component of the amplitude equivalent value of the incident light and an s-polarization component of the amplitude equivalent value of the incident light, and

the measured result by said second measurer is not changed in accordance with the measured result by said first measurer.

2. (Cancelled)
3. (Previously Presented) The optical characteristic measuring instrument according to claim 1, wherein the phase shift equivalent value is obtained by differentiating a phase shift by an optical angular frequency.
4. (Previously Presented) The optical characteristic measuring instrument according to claim 1, wherein the amplitude equivalent value is the square of an amplitude.
5. (Previously Presented) The optical characteristic measuring instrument according to claim 3, wherein a group delay time measurer measures a group delay time of the device under test based upon the measured result by said second measurer.
6. (Currently Amended) An optical characteristic measuring method for measuring an optical characteristic of a device under test, comprising:

receiving light emitted from the device under test;

separating the received light into p-polarized light and s-polarized light;
outputting the p-polarized light and s-polarized light;
generating incident light;
applying intensity modulation to the incident light and emitting modulated light;
making the incident light which has undergone the intensity modulation incident on the device under test, wherein the incident light is coincident with a p-polarization axis and an s-polarization axis of said p-polarized light and s-polarized light;

measuring a phase shift equivalent value and an amplitude equivalent value of the incident light based upon the p-polarized light and s-polarized light;

measuring a phase shift equivalent value of the incident light based upon the light emitted from the device under test; and

measuring the optical characteristic of the device under test based upon the measured phase shift equivalent value and amplitude equivalent value of the incident light based upon the p-polarized light and s-polarized light[[,]]; and

measuring the optical characteristic of the device under test based upon the measured phase shift equivalent value of the incident light based upon the light emitted from the device under test, if there is a deviation between a p-polarization component of the amplitude equivalent value of the incident light and an s-polarization component of the amplitude equivalent value of the incident light.

wherein the result of measuring the phase shift equivalent value of the incident light based upon the light emitted from the device under test is not changed in accordance with the result of measuring the phase shift equivalent value and the amplitude equivalent value of the incident light based upon the p-polarized light and s-polarized light.

7. (Cancelled)

8. (Currently Amended) A computer-readable medium having a program of instructions for execution by a computer to perform an optical characteristic measuring process of an optical characteristic measuring instrument that measures an optical characteristic of a device under test, comprising: a polarization separator that receives light emitted from the device under test, separates the received light into p-polarized light and s-polarized light, and outputs the p-polarized light and s-polarized light; a light generator that generates incident light; an optical modulator that applies intensity modulation to the incident light, and emits modulated light; and a light inputter that makes the incident light which has undergone the intensity modulation incident on the device under test wherein the incident light is coincident with a p-polarization axis and an s-polarization axis of said polarization separator;

said optical characteristic measuring process comprising:

measuring a phase shift equivalent value and an amplitude equivalent value of the incident light based upon the output from said polarization separator;

measuring a phase shift equivalent value of the incident light based upon the light emitted from the device under test; and

measuring the optical characteristic of the device under test based upon the measured phase shift equivalent value and amplitude equivalent value of the incident light based upon the p-polarized light and s-polarized light[.]; and

measuring the optical characteristic of the device under test based upon the measured phase shift equivalent value of the incident light based upon the light emitted from the device under test, if there is a deviation between a p-polarization component of

the amplitude equivalent value of the incident light and an s-polarization component of the amplitude equivalent value of the incident light.

wherein the result of measuring the phase shift equivalent value of the incident light based upon the light emitted from the device under test is not changed in accordance with the result of measuring the phase shift equivalent value and the amplitude equivalent value of the incident light based upon the p-polarized light and s-polarized light.

9-11. (Cancelled)